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EXAMINER

MAZUMDAR, SONYA

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,752

Applicant(s)

BRANCA ET AL.

Examiner

Sonya Mazumdar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 15-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-14 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 through 14, drawn to process of applying actives onto articles, classified in class 156, subclass 230.
 - II. Claims 15 and 16, drawn to an apparatus for printing, classified in class 118, subclass 200.
 - III. Claims 17 through 19, drawn to an article with active material, classified in class 428, subclass 32.1.
 - IV. Claims 20 and 21, drawn to a process of producing packages, classified in class 427, subclass 208.8.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another materially different apparatus such as an apparatus wherein the coater has a multitude of extruder applicators having a pitch of greater than 15 mm or an apparatus wherein the surface of the second tool has a shore hardness value less than 25 or greater than 90.

Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the

process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product can be made through saturation and absorbing the adhesive.

Inventions I and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the application of active material onto the articles does not have to be carried out in the manner of invention I. The subcombination has separate utility such as design application on clothing.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with George Leal on October 4, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1 through 14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15 through 21 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

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or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the multitude of applicators must be shown or the features canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The abstract of the disclosure is objected to because of the grammar. In line 7, "eh" should be "the". In line 8, "angel" should be "angle", and the phrase "thereby the surface even better; preferred is also a specific second surface" should be written in appropriate grammatical form. Correction is required. See MPEP § 608.01(b).

Claim Objections

8. Claim 2 is objected to because of the following informalities: there is an error "tool;" at the end of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely

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exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "close proximity to the surface", and the claim also recites "preferably positioned above the surface" which is the narrower statement of the range/limitation.

The term "preferably" in claim 6 is a relative term which renders the claim indefinite. The term "preferably" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claim 6 should define the length of the pitch to make an appropriate limitation.

11. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted element(s) is/are the object(s) being referred to in the first line of the claim following "process of claim 6 wherein the".

12. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The articles are undefined by the claims, therefore it is inappropriate to assume the correct selection of the articles where the melting temperature is higher than that of the first tool.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1, 2, 3, 6, 9, and 11 are rejected under 35 U.S.C. 102(b) as being unpatentable by Hefe (US 4141313).

With respect to claim 1, Hefe teaches the patterned deposition of an adhesive onto the outer surface of an article by means of an engraved roller provided with a pattern of depressions where the adhesive powder is deposited (column 1, lines 8-17). The method uses two adhesive powder suppliers placed around the engraved roller (column 9, lines 35-38). The surface of the first roller is contacted with a blade with an angle of 40 degrees with the tangent of the surface of the roller and lies with its end firmly against its' surface (column 5, lines 37-40, 51-52). The adhesive is drawn off the engraved roller and is directly applied through contact with the surface of the article on the take-off roller (Figure 1; column 5, lines 12-15; column 6, lines 54-59).

With respect to claim 2, Hefe teaches the patterned deposition of powdered adhesive material on the outer surface of an article by means of an engraved component provided with a pattern of depressions arranged in an outer face where the adhesive is raked in (column 1, lines 29-36). The method uses two adhesive powder suppliers placed around the engraved roller (column 9, lines 35-38). The adhesive is drawn off the engraved roller and is directly applied through contact with the surface of the article on the take-off roller (Figure 1; column 5, lines 12-15; column 6, lines 54-59).

With respect to claim 3, Hefe teaches the use of engraved roller that is rotating in a counter-clockwise direction and the take-off roller that is rotating in a clockwise direction (Figure 1; column 5, lines 12-13; column 6, lines 28-29).

With respect to claim 6, Hefe teaches the coater extruding the material into the depressions of the engraved roller and using the blades and gravity to aid the deposition of the material (Figure 1; column 1, lines 29-43).

With respect to claim 9, Hefe teaches the coating of an adhesive to be 27-42g/square meter (column 8, lines 45-49).

With respect to claim 11, Hefe teaches the use of the engraved roller having depressions where the adhesive is inserted (Figure 1; column 6, lines 33-35).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1, 7, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lender et al. (EP 0978263A1) in view of Hefe.

With respect to claim 1, Lender et al. teaches the deposition of a patterned adhesive onto the surface of an article by means of a printing roller (Figure 3, paragraph 0017). The surface of the first roller is contacted with a scraper blade tangent to the surface of the roller (paragraph 0039). The adhesive is drawn off the engraved roller

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and is directly applied through contact with the surface of the article on the material guiding roller (paragraph 0035).

The differences between Lender et al. and claim 1 are the use of a multitude of applicators and the angle of the scraper blade. Lender teaches the method to use two adhesive powder suppliers placed around the engraved roller (column 9, lines 35-38). Lender also teaches the surface of the patterned roller to be in contact with a blade with an angle of 40 degrees with the tangent of the surface of the roller and lies with its end firmly against its' surface (column 5, lines 37-40, 51-52).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a multitude of applicators as well as a blade with a specified angle from the surface. One would have been motivated to do so because a multitude of applicators would provide a fuller adhesive pattern coating on the surface and the amount of adhesive shown in the pattern is dependant on the angle of the blade.

The difference between Lender et al. in view of Hefele and claim 7 is the operation of a take-off roller above 30 degrees Celsius. Lender et al. teaches the guiding roller to neither be heated nor cooled, therefore it is appreciated that the operation takes place in room temperature, approximately 25 degrees Celsius.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to operate the take-off roller at room temperature. One would have been motivated to do so because it would not require further energy or expense to maintain the roller at room temperature.

The difference between Lender et al. in view of Hefele and claim 14 is using articles with a melting temperature of the articles lower than the engraving roller. While Lender et al. does not specifically detail that the heated roller is heated to a temperature above the melting temperature of the web or article, it is appreciated that the web or article used in Lender et al. can be a variety of materials with a variety of melting points.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use articles with a melting temperature lower than the engraving roller. One would have been motivated to do so since the roller will effectively soften the web and then allow the adhesive to adhere thereto more effectively only if the heated roller is kept at a temperature higher than the article temperature.

17. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hefele in view of Lender et al. and Friesch (US 5064492).

The difference between Hefele and claim 4 is the method of heating the coater and the engraved roller and cooling the take-off roller. Lender et al. teaches to keep the coater and engraving roller at a high temperature (Lender et al. - column 18; lines 25-41) and Friesch teaches the cooling of the adhesive after imprinting on the substrate (Friesch - column 3, lines 52-59).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to heat the coater and engraving roller and cool the take-off roller. One would have been motivated to do so because the adhesive should be at a solid or semi-solid plastic state at temperatures at or below the usage temperature of the disposable absorbent product (Lender et al. - column 4, lines 52-56).

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18. Claim 8, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hefele as applied to claim 1 and further in view of Kaylor et al. (US 2003/0138570)

The teachings of Hefele are as described above for claim 1.

The difference between Hefele and claim 8 is the speed of the process. Kaylor et al. teaches the substrate to undergo the rotogravure printing process up to 300 meters per minute (paragraph 0051, lines 7-12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to undergo the rotogravure process in more than 20 meters per minute in Hefele based on the teachings of Kaylor et al. One would have been motivated to do so because the printing to be finished during substrate manufacture or later during converting.

The difference between Hefele and claim 10 is the use of a take-off roller with a specified shore A hardness value. Kaylor et al. teaches an impression roller supporting the substrate having a preferable Shore A hardness of 70 (paragraph 0051, lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a roller having a Shore A hardness of 70 in Hefele based on the teachings of Kaylor et al. One would have been motivated to do so because Kaylor et al. teaches such a roller is known and used in applying active material to a substrate, thus can be used by one of ordinary skill in the art.

The difference between Hefele and claim 12 is the use of the engraved roller with specified width and depth of the cavities. Kaylor et al. teaches the width of the produced

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pattern ranging from about 0.1 microns to about 70 microns across (paragraph 0015).

The depth of the cavities in the engraved roller used in the examples was specified as 51 microns (paragraph 0075).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a roller having the previously specified width and depth of the cavities in Hefele based on the teachings of Kaylor et al. One would have been motivated to do so because Kaylor et al. teaches such specifications of the roller as known and used in applying active material to a substrate, thus can be used by one of ordinary skill in the art. "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." (MPEP § 2144.05)

The difference between Hefele and claim 13 is rotating the article around the take-off roller, which exits at a specified angle. Kaylor et al. teaches the contact angle of the active material with respect to the substrate is from about 30 to 70 degrees (paragraph 0016). It can be seen from Figure 1 that the contact angle and its' complementary angle, the exit angle of the formed web, are relatively congruent to each other.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rotate the substrate around the take-off roller, contact the substrate with the adhesive, and have the web exit at a specified angle in Hefele based on the teachings of Kaylor et al. One would have been motivated to do so because Kaylore et al. teaches such a method as known and used in applying a certain amount

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of active material to a substrate, thus can be used by one of ordinary skill in the art.

"Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." (MPEP § 2144.05)

Allowable Subject Matter

19. Claim 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

References showed coaters or applicators to have a higher temperature than the engraving roller, or made no mention of the temperatures used. In Hefele, the adhesive is desired to be above its melting point and the engraving roller is maintained at 35 degrees Celsius (column 8, lines 10-32). In Lender et al. the adhesive has an application temperature higher than that of the printing roll (column 4, lines 34-40).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Mazumdar whose telephone number is (571) 272-6019. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SM


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PRIMARY EXAMINER